

Pho

United States I

Fish an note to Ecology with

Mid-Columbia Ri

750

750

750

750

Thanks,

To mis sending a

To mis se Leaven Harrist Cullett is the

Fa Cifiter who complish in allthon to the Notice of Intertholice - TAKE PRIDE INAMERICA

Mr. Mike Lidgard U.S. Environmental Protection Agency 1200 6th Avenue Mail Stop OWW 130 Seattle, WA 98101

Subject: Request to amend point of discharge for Leavenworth National Fish Hatchery, Leavenworth, WA., under NPDES Permit No: WA-000190-2.

Dear Mr. Lidgard,

The Leavenworth National Fish Hatchery (LNFH) is requesting to modify the National Pollutant Discharge Elimination System Wastewater Discharge Permit issued by the Environmental Protection Agency on May 20, 1977. The LNFH has maintained all effluent limitations and monitoring requirements required under the existing NPDES permit. The LNFH is proposing to remove and replace components of the surface water delivery system in 2005 and 2006 which will necessitate a modification to its permitted discharge locations. This request is discussed in detail below. A vicinity map of the project area and a table of all current and proposed discharge locations are included for your reference.

## Background.

Leavenworth National Fish Hatchery (LNFH) is located in Chelan County, at Leavenworth, Washington. The hatchery annually produces approximately 1.6 million spring Chinook salmon smolts which, as adult fish, provide for important tribal, sport, and commercial fisheries.

Water supply for the hatchery is derived from a combination of surface and well water sources. The surface water supply system is comprised of an intake dam and intake structure in Icicle Creek, located upstream of the hatchery, and buried conveyance pipeline. The surface water diversion has been maintained and operated by LNFH as part of a 1939 contract between the United States and Cascade Irrigation Company (Cascade). Through this contract the intake diversion dam and its associated structures were rebuilt by the United States so as to supply both the existing 1905 water right held by Cascade and the new water right for the hatchery. The intake withdraws a maximum of 54.4 cfs of water from Icicle Creek and conveys, through buried pipeline, a maximum of 12.4 cfs to Cascade's water delivery system and a maximum of 42 cfs to LNFH.

The existing NPDES Permit allows LNFH to discharge "to receiving waters named Icicle Creek." The hatchery currently discharges two types of water; drain water and effluent water. Drain water is water which has been routed through the fish rearing units. This water is returned to Icicle Creek adjacent to the hatchery through the fish ladder or, when the ladder is non-operational, at the base of the ladder. Effluent water is drain water that is used to clean and/or treat the fish rearing units. This effluent water is routed to the pollution abatement pond for settling before being discharged to Icicle Creek just downstream of the hatchery. Again, the LNFH has maintained all effluent limitations and monitoring requirements required under the current NPDES permit.

## Proposed Action.

The water supply system is more than 60 years old and deteriorating rapidly and is no longer efficient or reliable. The hatchery is proposing to remove and replace the components of the surface water delivery system over a two year period as part of LNFH's Water Supply System Rehabilitation Project (Project). The purpose and need of this Project is to provide year-round fish passage past the low head dam at the intake facility, update fish screens at the intake's point of diversion, and replace structural components that are degraded and failing. During this construction period the water supply system will be taken off line and a temporary water supply system will be used (note that applications for change for appropriation of water for both LNFH and Cascade have been submitted to State of Washington Department of Ecology). The temporary water supply system will involve pumping water from the spillway pool in Icicle Creek (adjacent to the hatchery) to the hatchery's sand settling basin. Once there the water will be used to supply fish propagation activities at LNFH.

## Additional Discharge Location #1.

During Project construction and during the irrigation season (approximately May through September) up to 12.4 cfs of the hatchery drain water will be pumped to supply Cascade's irrigation needs (as the normal supply system will be shut down). Cascade Irrigation Company supplies water to it's customers through pipeline and open ditch. Water that is not used by the irrigators is discharged through open canal to the Wenatchee River. The use of LNFH's drain water during the Cascade irrigation season, discharged to the Wenatchee River, temporarily adds an additional discharge location. The location of all discharge points, current and proposed, is given in Table 1.

## Additional Discharge Location #2.

The LNFH and Cascade are but two of four entities withdrawing water from Icicle Creek. The LNFH recognized that baseline flow conditions in Icicle Creek may not provide adequate stream conditions for fish during low flow periods - typically August through September. In dry years this low flow period may extend into October. To ameliorate the effects of its own diversion, the LNFH has voluntarily included a pump-back system component to this Project. The LNFH has

Table 1. Leavenworth National Fish Hatcheries current and proposed additional discharge descriptions and locations.

Water Type	General Location Description	Icicle Creek River Mile	Latitude/Longitude
Current effluent	Abatement pond to Icicle Creek	2.7	N 47° 33' 34.9" W 120° 40' 14.4"
Current drain	Fish ladder to Icicle Creek	2.8	N 47° 33' 29.4" W 120° 40' 15.8"
Proposed Cascade temporary water supply	Irrigation ditch to Wenatchee River		N 47° 34' 32.7" W 120° 40' 26.8"
Proposed pump back system	Top of fish ladder at Intake to Icicle Creek	4.5	N 47° 32' 52.2" W 120° 41' 20.9"

proposed to pump drain water from the hatchery upstream to the intake through a second and smaller pipeline to be placed adjacent to the new main water supply line. Once operational, the pump-back system will allow the LNFH to return up to 20 cfs of drain water to Icicle Creek at the intake location during low flow periods. This pump-back water will discharge at the head of the new roughened channel fish ladder at the intake dam. This pump-back water will vastly improve in-stream and fish passage conditions in 1.7 miles of stream between the intake (river mile 4.5) and the hatchery (river mile 2.8).

In summary, LNFH's Water Supply System Rehabilitation Project will require two new discharge locations of the hatchery drain water. We are requesting EPA to augment the currently permitted point of discharge for Leavenworth National Fish Hatchery, under NPDES Permit No: WA-000190-2, to include these additional proposed discharge locations.

If you have any questions or need additional information please feel free to contact me.

Sincerely,

Jim L. Craig

Deputy Project Leader

Cc: Julie Collins, LNFH



